Enrolment No./Seat No_____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE- SEMESTER–VIII (NEW) EXAMINATION – WINTER 2024

Subject Code:2180711   **Date:19-11-2024**
Subject Name: Python Programming
Time:02:30 PM TO 05:00 PM   **Total Marks:70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Simple and non-programmable scientific calculators are allowed.**

			MARKS
Q.1	**(a)**	Explain built-in datatypes of python.	**03**
	(b)	Write a Python program to print Fibonacci series upto n terms.	**04**
	(c)	What are the differences between C and Python?	**07**
Q.2	**(a)**	Explain different types of comments in python.	**03**
	(b)	Give the syntax and significance of string functions: title() and strip().	**04**
	(c)	What is lambda function in Python? Explain with an example.	**07**
		OR	
	(c)	Explain operator overloading in python with an example.	**07**
Q.3	**(a)**	Differentiate formal and actual parameter with example.	**03**
	(b)	What is Interpreter? Explain How python interpreter works.	**04**
	(c)	What do you mean by immutable data type? Explain immutable data types with their operations and functions.	**07**
		OR	
Q.3	**(a)**	How filter can be used in Python program? Explain with a suitable example.	**03**
	(b)	What is list in Python? Demonstrate use of any two methods of list.	**04**
	(c)	Write a Python program to find reverse of given number using user defined function.	**07**
Q.4	**(a)**	What is the use of islower() and isupper() method?	**03**
	(b)	Explain Tuples in Python with example.	**04**
	(c)	What is dictionary in Python? Explain with an example.	**07**
		OR	
Q.4	**(a)**	What is the difference between Python Arrays and lists?	**03**
	(b)	Write a Python program that calculates the area of square and triangle.	**04**
	(c)	Write a Python program to implement the concept of inheritance.	**07**
Q.5	**(a)**	Differentiate black-box and glass-box testing.	**03**
	(b)	Write a Python Program to multiply two matrices.	**04**
	(c)	How to create a thread in python? Explain with an example.	**07**
		OR	
Q.5	**(a)**	Explain raw_input() and input() in Python.	**03**
	(b)	Write a Python program to read a text file and do following: (1) Print no. of words (2) Print no. Statements	**04**
	(c)	Explain Caesar cipher and Write a python program to implement Caesar cipher.	**07**

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